

Current Water Conditions in Massachusetts

March 12, 2009



- February precipitation was below average
- February streamflows were normal
- February ground-water levels were normal
- February reservoir levels were normal and above normal

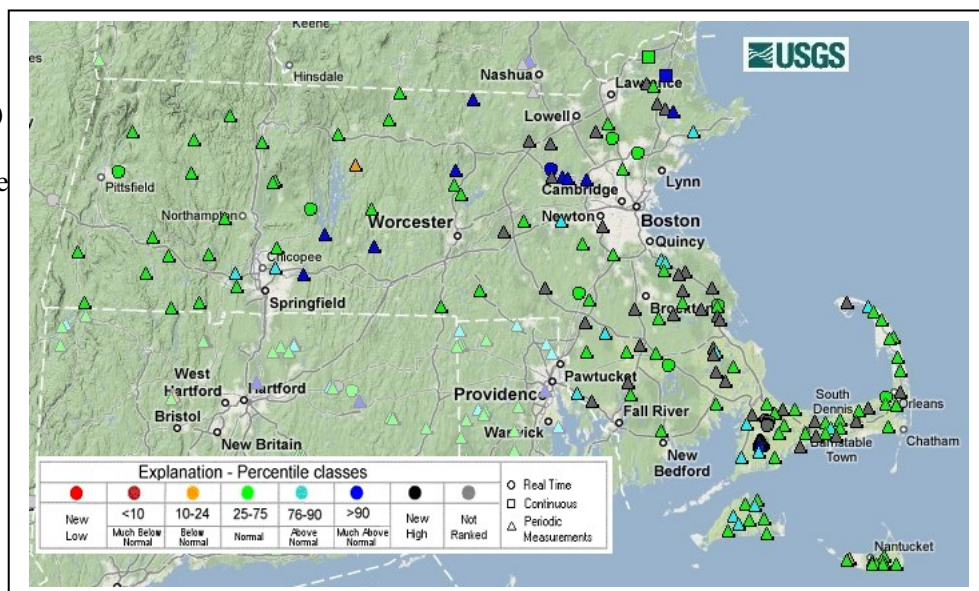
Precipitation Conditions

February state-wide precipitation equaled an estimated 1.91 inches, which is about 59 percent of the long-term average for February. The regions of Massachusetts received between 50 percent (Connecticut River) and 66 percent (Northeast) of average precipitation during February. The weather during the month was characterized by several minor precipitation events that were rain or snow changing to rain in easterly locations with more snow in the western areas of the State. February was ranked as the 16th driest in the last 116 years in Massachusetts. March precipitation to date has ranged from 1.5 to 2.5 inches which is, depending on location, about normal to 150 percent of normal for this time of the month.

A table of February 2009 estimated precipitation statistics, based on precipitation data from the Department of Conservation and Recreation and National Weather Service precipitation monitoring networks is attached. A map at the back of this report shows the distribution of February total rainfall in Massachusetts and adjacent areas of New England.

Ground Water Levels

Ground-water levels reported by the United States Geological Survey (USGS) at the end of February 2009 generally were normal across almost all of the State with a few wells with above normal levels. There were a few wells with much above normal levels located in an areas stretching from Springfield to the northeast corner of the State. The USGS assessment of ground-water levels is based on 124 wells in Massachusetts and Rhode Island with 10 or more years of record. Ground water and surface water conditions in MA drought regions are shown in a table at the end of this report.

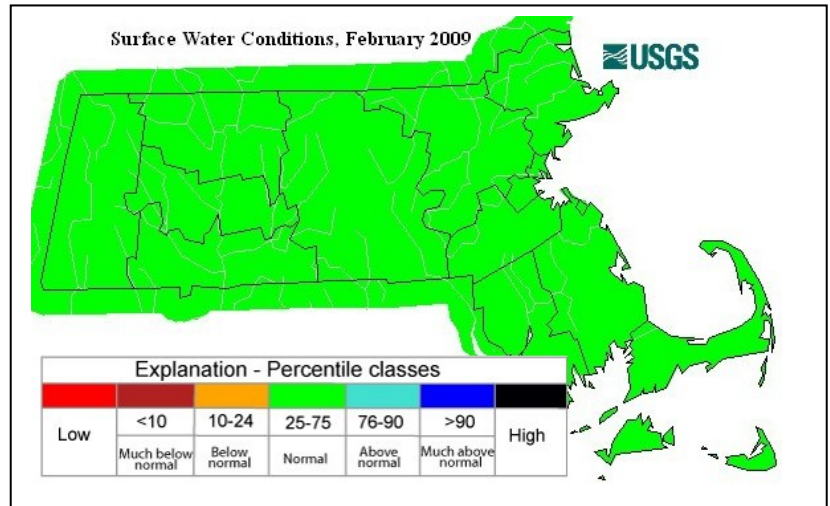


The USGS Ground Water Conditions Statement for the end of February 2009 can be viewed at the web site:
http://ma.water.usgs.gov/water/water_g.htm

Stream Flow

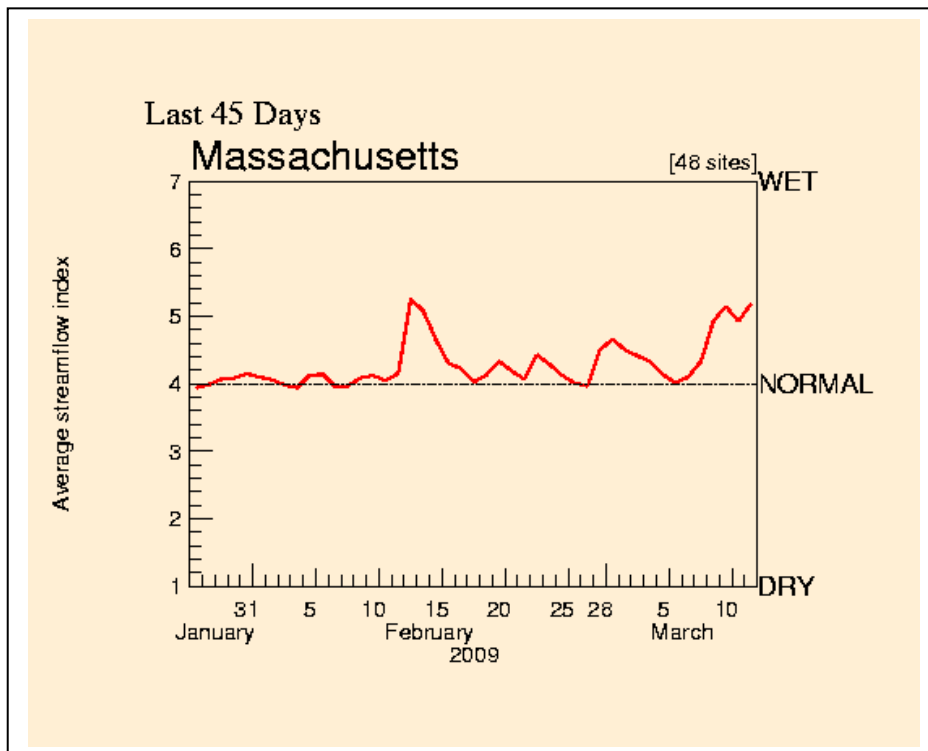
During February 2009 stream flows that are monitored by the Commonwealth of Massachusetts and United States Geological Survey (USGS) cooperative stream gaging program were mostly normal (green areas on map).

The graph below depicts a composite daily streamflow relative to normal streamflow for Massachusetts for the period of January 26, to March 12, 2009. In general, near to slightly above normal flows prevailed during the entire month. Several rises in streamflow were due to rain and above freezing temperatures that resulted in snow melt runoff. Streamflows remained slightly above normal in the early part of March. The graph is a composite of 48 real time gages across the state with a long period of record.



Additional information on streamflow is available from the USGS web page:

http://ma.water.usgs.gov/water/water_s.htm



KEY:

- 1 = New record low for day
- 2 = < 10th percentile
- 3 = 10th – 24th percentile
- 4 = 25th – 74th percentile
- 5 = 75th – 89th percentile
- 6 = ≥ 90th percentile
- 7 = New record high for day

Water Supply Reservoir Levels

Surface water reservoir percent full values for water supply sources provided by water suppliers are listed below. The reservoir percent full values listed are for the end of February and are reported to be generally normal to above normal for this time of year.

February /March 2009 Massachusetts Reservoir Status

Reservoir/City or Town	Percent Full	Reservoir/City or Town	Percent Full
Quabbin	100	Beverly/Salem	97.7
Worcester	100.7	Lynn	
Cobble Mt./ Springfield	88	Taunton/New Bedford/Assawompsett	101.9

Note: N.A. Indicates data not available for this report

Drought Indices/Forecasts

The National Drought Mitigation Center's (NDMC's) March 10, 2009 Drought Monitor Map shown at right indicates no drought conditions in Massachusetts or New England.

Standardized Precipitation Index:

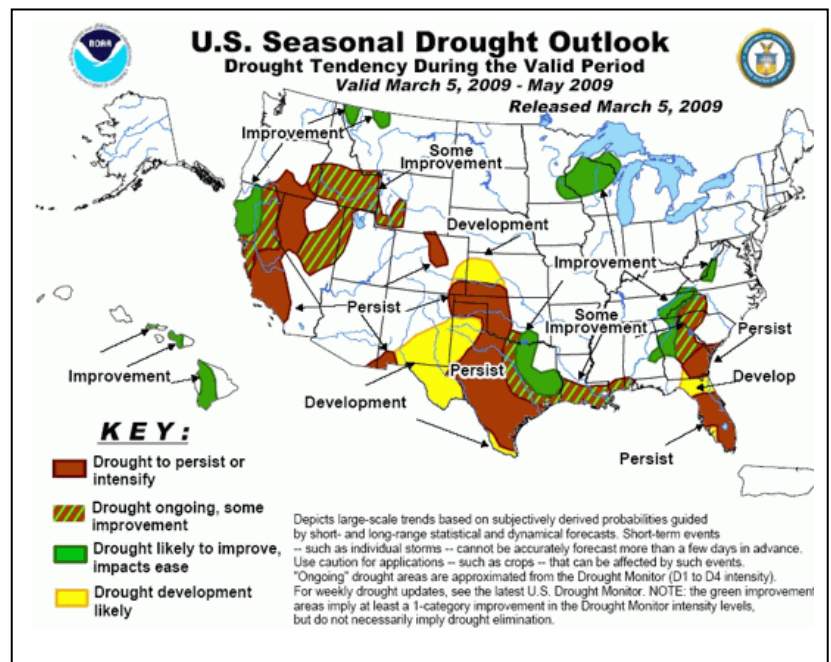
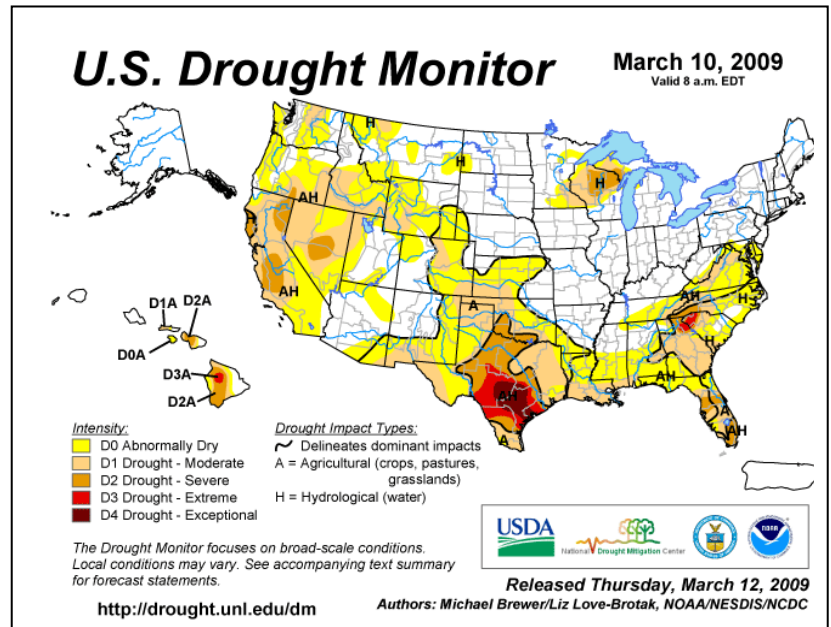
The Western Regional Climate Center's (Desert Research Institute, University and Community College System of Nevada) 1, 3, 6, and 12-Month Standardized Precipitation Index through the end of February show a range of conditions ranging from normal/moderately dry (1-month) to very wet/moderately wet (12-months) across Massachusetts.

NWS/NOAA's Climate Prediction Center: The U.S. seasonal Drought Outlook dated March 5, 2009 predicts normal conditions for Massachusetts through May 2009.

Extended Forecasts

Clear sunny conditions with high temperatures in the 40's are forecast through next Tuesday. The National Weather Service Climate Prediction Center's extended 6-10 and 8-14 day forecasts predict below normal temperatures and normal rainfall. The 1 and 3-month extended forecasts are for normal temperature and rainfall.

The NWS Climate Prediction Information can be found at <http://www.cpc.noaa.gov/index.php>





GENERAL WATER CONDITIONS IN MASSACHUSETTS - FEBRUARY 2009
EOEEA and MEMA DROUGHT MANAGEMENT PLAN REGIONS
[\(link to Massachusetts regions – source MADCR\)](#)

Massachusetts Regions	Surface-Water Conditions	Ground-Water Conditions
Cape and Islands	normal	normal
Southeast	normal	normal
Northeast	normal	above normal
Central	normal	normal
Connecticut River	normal	normal
Western	normal	normal

Note: Surface- and ground-water conditions for individual streamflow-gaging stations and wells June differ from general conditions.